

**RE-DEVELOPING A MONTANA FOOD PROCESSING INDUSTRY:
THE ROLE OF FOOD INNOVATION CENTERS**

Preliminary Results
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Research is underway that seeks to contribute to the policy discussion on re-developing a food-processing sector in Montana. We are exploring how food innovation centers might address existing gaps and serve Montana agriculture and consumers.

The term “food innovation center” refers to any program that offers facilities for food processing and testing, and often includes technical assistance for value-added agriculture, marketing, business development, and regulation compliance. Note that other terms being used often refer to the same services.

Babcock has interviewed Mission Mountain Food Enterprise Center’s Program Manager and ten directors of food innovation centers in other states and one province. Below, we provide a brief snapshot of these centers.

Detailed information on the successes, challenges, and suggestions expressed by these interviewees is not yet ready for release. Recommendations made based on the analysis will be shared with the committee and other interested parties.

Mission Mountain Food Enterprise Center, Ronan, Montana

- Structure and history
 - The Mission Mountain Food Enterprise Center (MMFEC) was started in 1998 after participating in the Alternative Energy Resources Organization’s (AERO) Montana Food System Initiative, which led a group of community members through an assessment of the local food system and identified key strategies that needed to be developed in order to build and enhance a local food system. A food-processing center was identified as a key strategic step in developing the local food system.
 - The center is a program of the Lake County Community Development Corporation (LCCDC), which is a non-profit, 501(c)(3) organization.
- Services provided
 - MMFEC provides assistance to anyone in the state of Montana who wants to develop a food product. Their services include sanitation training, food product development, process control development, assistance in meeting regulatory requirements, and assistance in product labeling and packaging.
 - LCCDC provides technical assistance to MMFEC clients in business and market plan development, capital development, and cooperative development.

- MMFEC also provides on a fee-based schedule, co-packing services, and shipping services for clients who wish them to do so.
- The Mission Mountain Market Association, a project of MMFEC, provides users of the facility access to additional marketing services such as the promotion of a gift basket of Montana products and attending the Made in Montana trade show.
- User groups
 - Most of MMFEC's clients are Montana businesses that are sole proprietors—Ma and Pa enterprises that have low job creation. Two anchor clients have expanded their businesses to the level of a 4+ job creation.
 - Since its inception, MMFEC has served 165 clients and currently has 32 clients utilizing the facility and its technical assistance services.
- Markets served
 - Most of MMFEC's clients market their products regionally to Montana and surrounding states; those clients who have less product generally sell locally.
 - Very few of MMFEC's clients are doing export because of low production numbers.
- Funding
 - MMFEC charges user fees for co-packing, kitchen and storage rental, and service and handling in the shipping depot. These fees do not cover the cost of the service, which is one of MMFEC's biggest challenges.
 - The technical assistance portion of the center is funded through federal and state grants and private funding.

Food Processing Center, Lincoln, Nebraska

- Structure and history
 - The Food Processing Center was started in 1983 when Nebraska legislators saw that very few value-added food products remained in the state.
 - The center is affiliated with the University of Nebraska-Lincoln. Although the center is part of the university system, it was created by the Legislature as a stand-alone organization. As such, it must operate on its own in terms of organization, management, and decision-making.
- Services provided
 - The center has a pilot plant, which is a processing facility that simulates industrial production in order to assess and evaluate a product or process performance. Product and process development involves figuring out the specifics of a food product's manufacturing, such as the recipe, equipment needed, labeling, and marketing. The plant is also used for teaching and research. Of the services they provide, the pilot plant gets the most use because of the center's equipment and expertise.
 - The center also has a microbiology lab and a process analysis lab.

- In addition, the center has an entrepreneur program, does feasibility studies, and assists with labeling analysis.
- User groups
 - Sixty to eighty percent of the Food Processing Center's users are from Nebraska.
 - Many of the center's users are individual entrepreneurs developing a food product. The center also serves medium to large sized companies.
 - Since July of 2007, the center has served between 35 and 40 clients—some of them repeat customers. The number of users varies each year, and excludes those clients who use the center solely for laboratory testing.
- Markets served
 - Most of the clients are focused on Midwest markets, although they have begun to move into global markets.
- Funding
 - Thirty to forty percent of the funding comes from the state in the form of salaries included in the University's budget.
 - The balance of the funding comes from grants, service fees, and equipment rental.
 - The center charges user fees for all services, including pilot plant rentals, product development assistance, and workshops. The fees are charged at an hourly rate.
 - The center also writes grants to many organizations, including the Manufacturing Extension Partnership, the Department of Commerce, and the USDA.

Food Technology Center, Caldwell, Idaho

- Structure and history
 - The Food Technology Center was started in 2002 by the College of Agriculture and Life Sciences at the University of Idaho.
 - The center is part of the University, but must still be self-sufficient.
- Services provided
 - The Food Technology Center has a 7,000 square foot commercial kitchen that provides business and technical assistance to people who want to commercialize a food product. The center offers a basic food class that all clients must go through before starting production of the product.
 - Clients also receive help with product and process development, nutritional analysis, analytical services, and many other issues.
 - The center helps companies that want to scale-up (i.e., increase the amount of food product produced). For example, making 50 loaves of bread requires a much different process than making 500 loaves of bread.
- User groups
 - Out of the center's 60 clients, around five of them are farms; most are business entrepreneurs, including several restaurants.
 - The center creates partnerships between local growers and entrepreneurs.

- Markets served
 - The center's clients sell into a variety of markets.
 - The Director expressed support for and opportunity to serve the local food economy, and therefore encourages clients to market their products locally and regionally as much as possible.
- Funding
 - Fees are charged on a sliding scale depending on the equipment being used, the amount of energy being consumed, and the amount of staff consultation and intervention.
 - The center breaks even with the fees charged for services, but it is the Research and Development (R & D) portion of the facility that pays for freight, new equipment, etc. R & D involves contracting with private firms like agricultural chemical companies and large food corporations. These contracts can be worth between \$20,000 and \$50,000.
 - The University of Idaho's Food Science and Toxicology Program pays most of the personnel costs.

Food Processing Development Center, Leduc, Alberta

- Structure and history
 - The Alberta government started the Food Processing Centre in 1984 in direct response to the perceived need to add value to the province's commodity products.
 - The center is 100 % government owned and operated.
- Services provided
 - The Food Processing Development Centre offers its clients assistance with product and process development.
 - The center also has a fully equipped pilot plant and laboratory in which clients can work on scaling up their production and do interim processing. Interim processing means that a company can run their business out of the center for a period of time, but they must have an exit strategy.
 - The center provides its clients with expertise in the form of meat, cereal, dairy, and bakery scientists.
- User groups
 - Clients include everything from small and medium sized enterprises to industry organizations (e.g., barley, beef, pulses, pork) to multinational corporations.
- Markets served
 - The center's clients sell to a range of markets—everything from local farmers' markets to international shipping.

- Funding
 - Service fees cover one third of the center's operating costs, and the provincial government funds the other two thirds.

Taos Food Center, Taos, New Mexico

- Structure and history
 - The Taos County Economic Development Corporation (TCEDC) has been working for 12 years to alleviate problems such as structural poverty, dead-end jobs, and unemployment that affect the people of northern New Mexico.
 - The Taos Food Center is just one of TCEDC's programs. It operates as a private non-profit 501(c)(3) organization.
- Services provided
 - The Taos Food Center provides its clients with a 5,000 square foot licensed commercial kitchen.
 - The center assists its clients with issues such as scale-up, equipment usage, nutritional analysis, pH testing, labeling, and ingredient sourcing.
 - The center also operates a business incubator, which assists clients with tasks such as licensing, permitting, and business and marketing plans.
- User groups
 - Most clients are new to the food industry, and they represent a diversity of food products and business models.
 - The center operates under a familial and community-based system in which assistance is available to anyone and everyone who is interested in developing a food product.
- Markets served
 - Clients sell mostly to regional markets, although several ship internationally.
- Funding
 - As a result of the center's familial and community emphasis, rental rates for storage and kitchen use at the center are artificially low. The TCEDC Business Park subsidizes these services.
 - The center also relies on grant money.

Joseph J. Warthesen Food Processing Center, Saint Paul, Minnesota

- Structure and history
 - The Joseph J. Warthesen Food Processing Center is part of ongoing teaching, research, and service at the University of Minnesota's Department of Food Science and Nutrition.
 - The Department of Food Science and Nutrition, together with the processing facility, was started in 1970.

- Services provided
 - Since 1970, the department has brought together meat, dairy, grain, extrusion, and beverage processing, and now serves many clients outside of the department.
 - Non-processing services are coordinated through individual faculty on a consulting basis.
 - The department also has the ability to offer contract services to people outside of the university in order to make the department's facilities and expertise available to more people.
- User groups
 - Clients of the department's processing facility are very diverse—local entrepreneurs, the largest and second largest companies in the world, and everything in between.
- Markets served
 - Accordingly, the department's diverse clients also produce a tremendous range of products for a broad array of markets.
- Funding
 - All of the services at the processing facility include a user fee. These fees completely cover the cost of the service, in addition to paying the bills and faculty salaries.
 - The university does not assist with funding.

The Food Innovation Center, Portland, Oregon

- Structure and history
 - The Food Innovation Center was constructed in 1999, at which time clients started using the center. It became an Oregon State University (OSU) experiment station in 2000.
 - The center is a partnership between OSU and the Oregon Department of Agriculture (ODA).
- Services provided
 - The center has a semi-complete pilot plant where clients can bring their equipment to use on their own. The plant does have freezer space and cold storage, but the focus of the center is more on technical assistance regarding product development than actual processing.
 - The center also offers assistance with nutritional labeling, commercialization, recipe formulation, packaging, food safety, and sensory testing.
- User groups
 - The center serves 50-70 clients per year, a number that is currently increasing.
 - Most of the center's clients are from the Pacific Northwest, especially Oregon and Washington.

- For the most part, start-up and mid-sized companies use the product development services; larger companies use the consumer/sensory testing and focus group services.
- Markets served
 - Out of the center's clients, small companies usually sell to local markets; mid-sized companies sell to local and regional markets with a few exports; and large companies sell to regional, national, and export markets.
- Funding
 - The center runs on a mixture of state funding and user fee funding, with some federal dollars in the form of grant money.
 - User fees support the fixed-term faculty at the center. The tenure track faculty is supported by the State.
 - Service fees are determined on a per hour basis. The center does not want to charge a price that would eliminate the small business, but it also does not want to undercut other private industries.
 - Currently service fees are paying for approximately 60 – 70 % of the center's costs. At this point, OSU subsidizes the center's services. Hopefully in a year or two they will be unsubsidized.

Northeast Center for Food Entrepreneurship at the New York State Food Venture Center, Geneva, New York

- Structure and history
 - The New York State Food Venture Center was created in 1988 by Cornell University professor Donald Downing. NYSFVC was a partnership between Cornell University and the New York State Department of Agriculture and Markets.
 - In 1998, NYSFVC submitted a grant to the USDA Fund for Rural America to expand the functions of the Food Venture Center from New York to the northeast. The University of Vermont (UVM) had submitted a similar proposal to the same USDA grant program, so the USDA recommended that UVM and the NYSFVC work together.
 - NYSFVC, together with UVM, received funding starting in 2000 for a regional center that would cover the northeast. They both continued providing assistance to northeast food entrepreneurs, while adding more training, mentoring, and educational programs. Together, the two centers would be called the Northeast Center for Food Entrepreneurship (NECFE).
 - When NECFE's original funding ended, the two centers decided to split and continue operating separately. NECFE now has reduced personnel, but has maintained the services offered to New York and the rest of the northeast.
- Services provided

- NECFE's focus is on food science: if a client needs help with business planning or marketing, the center will refer them to local resources such as small business centers, Cornell's Farm Link program, and others.
- NECFE does five or six training programs per year for New York state. These programs provide expertise on specific topics (i.e. acidified foods, dry products, starting a food business, jams/jellies, etc.).
- The center also uses Cornell University's pilot plant facility to help clients assemble commercial food products.
- User groups
 - NECFE normally receives approximately 1,000 requests for assistance each year. The center works in depth with about 200 and ends up with about 500 new food products each year.
 - Because New York is a large state, the center receives few walk-in clients. Most clients work with the center through mail, email, phone, and fax.
- Markets served
 - The center's clients sell to a diverse array of markets.
- Funding
 - NECFE is funded by a combination of grants, user fees, and Cornell University salaries.
 - The center charges an hourly fee for lab work, regulatory assessments, and other such services. The fee for New York clients is \$50/hour, and \$75/hour for clients from surrounding states.

Rutgers Food Innovation Center, Bridgeton, New Jersey

- Structure and history
 - The Rutgers Food Innovation Center began as a result of research conducted in 1997 by the Rutgers Department of Agriculture, Food, and Resource Economics.
 - The Food Innovation Center is part of the Rutgers New Jersey Agricultural Experiment Station. It was established in a federal empowerment zone, a federally recognized blighted area in the agricultural sector of southern New Jersey.
 - The Rutgers Food Innovation Center was officially opened in 2001. In its first phase, the center was simply a rented office staffed by people from the food industry.
 - The center was able to begin construction one year ago to build their entirely grant funded 23,000 square foot facility that will be opening at the end of July 2008. Up until now, the center has serviced their clients in a virtual capacity and will now be able to do much more.
- Services provided
 - Once the building is completed, the center will have a kitchen, sensory analysis lab, microbiology lab, focus group room, conference facility with distance

learning capabilities, and a shared use processing area with fresh cut, bakery/dry processing, cooking, and packaging sections.

- User groups
 - The Rutgers Food Innovation Center caters to four types of clients:
 - Farmers/cooperatives: Agricultural producers looking to develop value-added products
 - Start up entrepreneurs: Non-farmers trying to develop a start up company
 - Established food companies: Major employers in the state that are important to New Jersey's business sector
 - Retail/foodservice establishments: Farmers markets, retail/foodservice establishments that want to buy local, etc.
 - The center has served 800 clients so far, which averages out to about 125 per year.
- Markets served
 - Just as the Food Innovation Center clients are very diverse, so too are the markets these clients sell to.
- Funding
 - Once the new facility is open, the center will charge user fees for services provided or space rented on a daily basis.
 - The center will continue to pursue grants in the future but will hopefully become self-sustaining through client fees over time.

Vermont Food Venture Center, Fairfax, Vermont

- Structure and history
 - The Vermont Food Venture Center (VFVC) began in June of 1996 with the assistance of a \$300,000 USDA grant. VFVC is a project of the Economic Development Council of Northern Vermont (EDCNV), an agency that works on economic development projects.
 - EDCNV is a 501(c)(4) organization, and the VFVC is a 501(c)(3) organization within that.
 - VFVC has also had formal and informal relationships with the University of Vermont (UVM) and Cornell University over the years.
- Services provided
 - VFVC considers itself a full kitchen incubator as opposed to a community kitchen. The center does more processing and offers more technical assistance than the typical community kitchen, which is why it considers itself as such.
 - One of the most important aspects of VFVC's work with its clients is the intake process. The center staff tries to hone in on what the client has for available resources in order to tailor a rollout strategy appropriate for that amount of funding.
- User groups

- VFVC clients are a very diverse group. Many are the typical specialty food entrepreneur who has had a successful career and wants to become an entrepreneur.
- VFVC has some agricultural producers using their facilities, but this set of clientele has been a challenge because of most producers' time constraints.
- Other clients include restaurants bottling their house specialty, people just beginning to get their food business off the ground, and companies that sell their products nationally.
- Most clients of the VFVC come from within a 45-mile radius of the facility.
- On average, VFVC does about 35-40 processing ventures each year, with two to three times that number of inquiries and consulting projects.
- Markets served
 - VFVC encourages its clients to do a combination of direct retail and some small wholesale; the lucky clients will be able to grow into a larger distribution.
- Funding
 - The Vermont Food Venture Center charges between \$22 and \$27 for kitchen rental. There is a \$100 membership fee that covers a client's startup process.
 - In years that it does not break even financially, VFVC receives some funding through their parent organization.
 - In addition to client fees, the center does consulting, training, and contract work to bring in extra money.

Prince Edward Island Food Technology Centre, Charlottetown, Prince Edward Island

- Structure and history
 - The Prince Edward Island Food Technology Centre began in 1987 as an initiative of the provincial government. The government decided that it wanted to support industry on the island by enabling value-added ventures and technical assistance to the food industry.
 - The Executive Director of the center reports directly to the CEO of Prince Edward Island Business Development, who reports to the Minister of Innovation and Advanced Learning.
 - The Centre is located on the University of Prince Edward Island campus, but is not affiliated with the university in any way.
- Services provided
 - The most important of the center's services is food safety analysis. Many seafood processors in particular need the center's analytical services in order to get their product into the main US markets.
 - The Centre also offers product development services, which are becoming more important as companies need to diversify and innovate in order to remain competitive.

- The Centre operates a pilot plant in which to do product development; the plant is also used as an incubator facility that allows clients to sell their products out of the Centre.
- Some other services offered by the Centre include sensory analysis, chemical analysis, and troubleshooting.
- User groups
 - Most clients of the PEI Food Technology Centre are small to medium sized food processing companies with usually less than 100 employees.
 - The Centre also caters to larger multinational corporations who primarily use laboratory as opposed to product development services.
 - For analytical services, the Centre typically serves about 100 clients per year; for product development and other technical projects, that number is around 50 clients per year.
- Markets served
 - The center's clients sell locally, internationally, and to many types of markets in between.
- Funding
 - The idea from the beginning was for the Centre to run on a cost recovery basis. Industry would be charged for the center's services, one of which would be to help industry source funding from other agencies.
 - The Centre has a total operating budget of \$3.5 million; \$1.5 million of that is in the form of an operating grant from the province, and the balance is revenue from client services.
 - The National Research Council of Canada (NRC) also has a contribution agreement with the Centre. The NRC provides funding (about \$60,000 per year) to cover basic preliminary innovation work at no cost to the client.
 - The center's goal is to have the cost of the services covered by the service fee. There is a per diem charge for each staff person; daily fees vary depending on the level of experience of the staff person involved, materials used, access to pilot plant, etc.